
A NEW SPECIES OF *ILEX* (AQUIFOLIACEAE) FROM CENTRAL AMERICA

While preparing a treatment of the Aquifoliaceae for *Flora de Nicaragua*, several specimens not referable to any described species of *Ilex* were encountered. The specimens were obviously related to the widespread *Ilex guianensis* (Aublet) O. Kuntze but differed in several key characters of leaf venation and fruit morphology. Further study of the material available in European and American herbaria proved these to represent a new species, described below.

Ilex tectonica Hahn, sp. nov. TYPE: Belize.

Toledo, Columbia Forest Reserve, vicinity of forest camp, ca. 6 miles due south of Cabro, in upper Río Grande drainage area, ca. 1,000 ft., high forest, tree, 45 m tall, dbh 70 cm, 5–9 May 1976, G. R. Proctor 36093 (holotype, MO; isotype, BM). Figure 1.

Ex affinitate *I. guianensis* et *I. belizensis* ab utroque praecipue natura foliorum, laminis chartaceis, marginibus planis, apicibus caudatis, venationibus subtus distincte reticulatis luteisque, etiam fructibus ovoideis, stigmatum vestigiis prominentibus, conice angularibus, elevati supra pericarpia distincta.

Tree to 45 m tall, to over 1 m dbh, laxly branched; trunk reportedly buttressed; bark pale brownish gray on mature stems, with oval lenticels 1 mm long, the new stems drying black or dark brown with white spots; stipules triangular, 2 mm long, 1 mm wide, subtending inflorescences or not. Leaves elliptic, chartaceous, the apex shortly caudate, the base acute, slenderly attenuate, 7–10 cm long, 3.5–4.5 cm wide, the margin usually entire, sometimes minutely spinulose toward the apex, epunctate, venation elevated abaxially, brochidodromous, semicraspedodromous, reticulate, the veins yellow and obvious; petiole thickened, adaxially channeled, 4–8 mm long. Inflorescence of axillary dichasia branched to

2–3 orders, clustered on reduced stems while in flower, later expanding when in fruit, the main rachis and rachillae winged or flattened, the primary rachis 8–13 mm long, the secondary rachillae 3–5 mm long, the tertiary rachillae 1–3 mm long; bracts triangular, paired, 1–1.5 mm long, sometimes deciduous; bracteoles similar but smaller. Flowers (4–) 5-merous, regular, actinomorphic, unisexual; staminate flowers with sepals acute, 1 mm long, sometimes irregular at the apex; petals broadly elliptic, obtuse-rounded at the apex, thinner along the margin, basally united with the filaments, 2–2.5 mm long, 1.5 mm wide; stamens antisealous; filaments 2–3 mm long; anthers 1 mm long; pistillodium conical, 1 mm long; carpellate flowers not seen. Fruit ovoid, 5–6 mm long, 4 mm diam.; pericarp thin, red at maturity; stigma persistent and conspicuous in profile, conical; mesocarp fleshy but scant; pyrenes crescent-shaped, triangular in cross section; endocarp ligneous, striated abaxially.

Additional specimens examined. HONDURAS. ATLANTIDA: Reserva Forestal de Lancetilla, *Hazlett* 2928 (MO, F); Lancetilla Valley near Tela, *Standley* 53191, 54736 (A), 55449 (A, F). YORO: SW of La Florida, 8 km by Agua Zarca, *Hazlett* 3105 (F, MO). NICARAGUA. CHONTALES: 4 km al NW de Santo Domingo, *Aranda et al.* 83 (MO). MATAGALPA: near Peñas Blancas, *Molina s.n.* (F). ZELAYA: Kurinwasito, 50 km SE de Río Blanco, *Sandino* 4845 (MO); ca. 5 km al S de Waslala, *Grijalva & Moreno* 1205 (MO).

Common names. San Juan macho, sibuc che, powder stick (Belize), camibar, areno (Nicaragua), San Juan campano, San Juan arenillo (Honduras).

Typically found in tall moist forests, *I. tectonica* is sometimes found with pines in drier mixed forests. Throughout its known range, the species flowers in the dry season of April and May and fruits through July. According

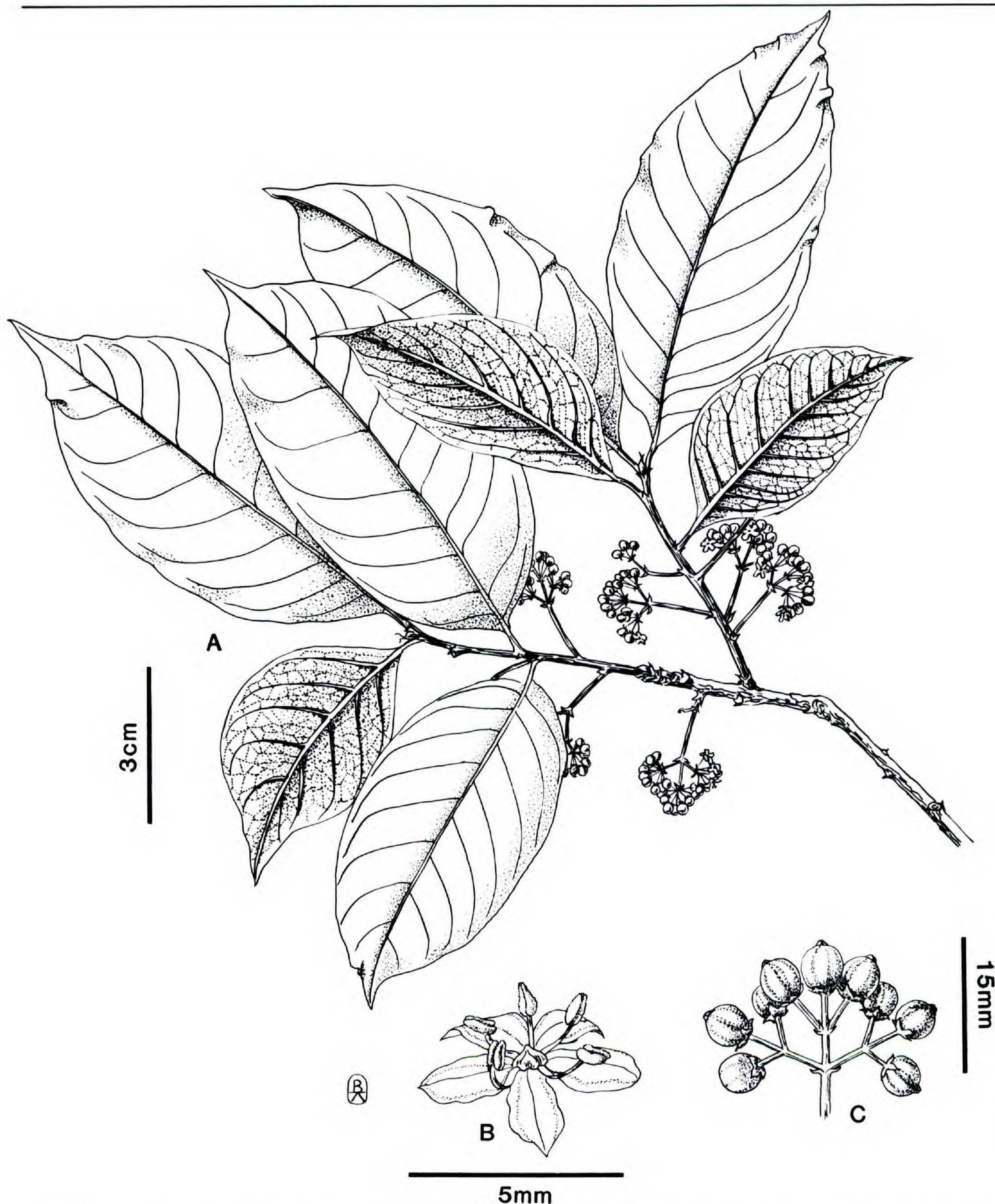


FIGURE 1. *Ilex tectonica*. — A. Flowering branch (Proctor 36093). — B. Staminate flower (Proctor 36093). — C. Infructescence (Grijalva & Moreno 1205).

to label information (*Molina s.n.* and *Hazlett 3105*), it is utilized for timber. In recognition of this, the specific epithet, derived from the Greek *tektonikos* (used for construction), is applied.

Components of the *Ilex guianensis* species complex are found throughout the Caribbean

and present some of the most difficult taxonomic problems among neotropical members of the genus. The widespread distribution and relatively homogeneous morphology typical of many coastal strand and scrub species hold true for individuals of this complex growing in such associations. A considerable amount

of the confusion, therefore, is due solely to the insular distribution of this group and the synonymy common to pan-Caribbean taxa. However, the ability of the group to invade recently disturbed areas in the highlands of Central America and the Caribbean Islands and apparent hybridization with native upland congeners present additional taxonomic challenges. A key to the Central American members of the *Ilex guianensis* complex is presented below.

- 1a. Leaves coriaceous, margins usually revolute, apex usually obtuse or retuse, sometimes slightly acute; new stems drying gray or green; coastal scrub, inland savannas, occasionally moist forests and disturbed upland clearings; Atlantic coast of Central America and northern South America, Gulf of Panama, and the Greater Antilles *Ilex guianensis*

- 1b. Leaves chartaceous, margins flat, apex acute; new stems drying black or brown.
2a. Young stems drying black; secondary leaf venation obscure; fruits spherical; stigmatic residue spreading, not prominent in profile above the pericarp; advanced forest on limestone; Belize *Ilex belizensis*
2b. Young stems drying brown with white lenticels; secondary leaf venation distinct, reticulate, the veins yellow; fruits ovoid; stigmatic residue angular-conical, raised above the pericarp; moist forest or mixed with pines; Belize, Honduras, and Nicaragua *Ilex tectonica*

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